CLAIMS

1. A device for fabricating a lead frame by press forming provided with:

a die having a flat face, on which a lead frame to be fabricated by press forming is to be placed, and a concavity, which is dented relative to the flat face, the die possessing a fabricating face extending from the bottom of the concavity to the flat face through a slant, which is interposed between the bottom of the concavity and the flat face, the fabricating face contributing the fabrication of a lead frame by press forming, and

a punch having punching faces formed so as to be opposite to the fabricating faces of the die for the fabrication of the lead frame by press forming,

at least one of the die and the punch being movable so as to hold the lead frame between the fabricating face of the die and the punching face of the punch for the fabrication of the lead frame by press forming,

wherein the bottom of the concavity of the die has a bottom concavity formed therein, which is dented relative to the bottom, and the punch has a front end opposite to the bottom of the concavity of the die, the front end being formed so as to have a portion partially spreading over the bottom concavity.

2. The device of claim 1, wherein the lead frame to be fabricated by bending has a die-pad, on which a semiconductor chip is to be mounted, and support bars for supporting the die-pad, and wherein the concavity of the die is formed such that the die-pad of the lead frame is located over the concavity and the respective support bars of the lead frame straddle the margins of the concavity when the lead frame is placed on the flat face of the die, whereby the support bars of the lead frame is hold between the fabricating face of the die and the punching face of the punch.

3. The device of claim 1, wherein the punch is movable relative to the die.

4. A method for fabricating a lead frame by press forming using a device comprising a die having a flat face, on which a lead frame to be fabricated by press forming is to be placed, and a concavity, which is dented relative to the flat face, the die possessing a fabricating face extending from the bottom of the concavity to the flat face through a slant, which is interposed between the bottom of the concavity and the flat face, the fabricating face contributing the fabrication of a lead frame by press forming, and a punch having punching faces formed so as to be opposite to the fabricating faces of the die for the fabrication of the lead frame by press forming, at least one of the die and the punch being movable so as to hold the lead frame between the fabricating face of the die and the punching face of the punch for the fabrication of the lead frame by press forming, the method using, as the device for the fabrication by press forming, a device comprising a die having a concavity, the bottom of which has a bottom concavity formed therein, which is dented relative to the bottom, and a punch having a front end opposite to the bottom of the concavity of the die, the front end being formed so as to have a portion partially spreading over the bottom concavity.

5. The method of claim 4, which fabricates a lead frame having a die-pad by press forming, on which a semiconductor chip is to be mounted, and support bars for supporting the die-pad, and wherein the concavity of the die is formed such that the die-pad of the lead frame is located over the concavity and the respective support bars of the lead frame straddle the margins of the concavity when the lead frame is placed on the flat face of the die, whereby the support bars of the lead frame are held between the fabricating face of the die and the punching face of the punch.

6. The method of claim 4, wherein the punch is moved relative to the die.

7. A lead frame fabricated by press forming and having an upper bent portion and a lower bent portion as a result of the fabrication by press forming, wherein the lead frame has a squashed part having a reduced thickness on the lower side of the lower bent portion at or in the vicinity of the lower bent portion.

8. The lead frame of claim 7, which has a die-pad, on which a semiconductor chip is to be mounted, and support bars for supporting the die-pad, and wherein each of the support bars has the squashed part.